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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/697,009	10/25/2000	Bruce L. Davis	60319	4530

23735 7590 08/13/2004

DIGIMARC CORPORATION  
19801 SW 72ND AVENUE  
SUITE 250  
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EXAMINER

JANVIER, JEAN D

ART UNIT	PAPER NUMBER
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3622

DATE MAILED: 08/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/697,009

Applicant(s)

DAVIS ET AL.

Examiner

Jean D Janvier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05/26/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2 is/are pending in the application.
- 4a) Of the above claim(s) 3 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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***Response To Applicant's Appeal Brief***

In response to the Applicant's Appeal Brief, filed on May 26, 2004, the Examiner herein withdraws the last Office Action and re-opens prosecution. And a Non-Final Office Action is submitted below.

***Response to Applicant's Arguments***

Applicant's arguments with respect to claim 2 have been considered but are moot in view of the new ground(s) of rejection.

Moreover, regarding the taking of "Official Notice", related to watermarking an object, the Examiner has already addressed these arguments. The Applicant has also described, on page 1: 29-30 of the specification, that a plurality of watermarking techniques are well known in the art.

**DETAILED ACTION**

***Specification***

***Priority***

Applicant's indirect claim for domestic priority under 35 U.S.C. 119(e) to Provisional Application 60/134, 782, file on 05/19/1999, through Application 09/343,104, filed on 06/29/1999, is acknowledged. However, the provisional application upon which priority is claimed fails to provide adequate support under 35 U.S.C. 112 for claim 2 of this application. For examination purpose, the Instant Application will receive

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a filing date of 10/25/2000 unless the Applicant can provide document to support an earlier filing date. Further, Bruce Davis' name, a co-inventor in the Instant Application, does not appear in the provisional Application. In addition, the Instant Application has only two inventors while Application 09/343, 104, a priority document, has six inventors.

### ***Information Disclosure Statement***

**The IDS filed on 09/15/03 was considered and initialed by the Examiner, as shown on the previous PTO Form 1449, except for the NPL documents, which were not received. Applicant was requested to supply copies of these documents.**

Further, the IDS, filed with the Appeal Brief, has been considered.

### ***Status of the claims***

Applicants had canceled claims 1 and 4 without traverse or prejudice. Further, claim 3 was withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 6. Finally, claim 2 is still pending in the Instant Application.

### ***Claim Objections***

Claim 2 is objected to because of the following informalities:

Concerning claim 2 recites the steps of:

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“Presenting a digitally watermarked object to a reader device at a first location, and triggering a first response thereby;

Presenting the object to a reader device at a second location, and triggering a second, different response thereby;

Wherein at least one of said responses comprises the issuance of a coupon”.

As can be seen above, the claim never recites that the reader device at either location is capable of reading the digital watermark imprinted on the object. To this end, the Examiner assumes that the object has other marks such as a bar code imprinted thereon and that either location has a convention reader capable of reading the bar code and hence, the digital watermark on the object does play any role and does not have any patentable weight. Further, in another instance, the digital watermark will be given patentable weight.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Lemon, US Patent 4, 674, 041.

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As per claim 2, Lemon discloses a system having remotely located coupon printing stations installed in stores and capable of limiting the number of coupons printed in a given time period. Each coupon station has a display for indicating the available coupons, selection means to allow a consumer to choose the desired coupon and a coupon printer coupled to a station (T) for printing the selected coupon. The system also disables display of a particular coupon when a pre-selected coupon limit has been reached (col. 2: 16-19; col. 3: 39-54; col. 4: 47-51). The manufacturer may prescribe a particular number of coupons to be redeemed collectively and at each particular retail store. The present invention also greatly reduces the possibility of fraud by enabling coupons to be encoded with store identification numbers, expiration dates, uniform product codes, and other information at the point of distribution. The system **provides point of sale distribution and same day expiration dates** (col. 1: 55-67).

The system includes a stand-alone coupon-dispensing terminal T or kiosk provided at each retail store or location. Each stand-alone terminal communicates with a host central processing unit located remote from the stores (remote central repository or database storing coupon data). Coupons are displayed for customer selection at each dispensing terminal on a video menu via a cathode ray tube and touch screen combination. **Each terminal may be monitored and controlled via the host computer to obtain data such as the number of coupons issued and the identification of customers using the terminal.** The system enables the manufacturer to limit the number of a particular coupon issued **from a terminal at a store as well as the number issued**

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**in response to activation by a particular credit card.** Each terminal T, linked to the remote central database, includes a self-contained high speed coupon printer which prints the product information, date, time of day, uniform product code, expiration date, a store identification number or any other information desired for particular applications on each coupon issued. Each terminal T has at least a reader device capable of reading a magnetic strip on a credit card (col. 2: 5-28). A host computer H, related to the central database, is programmed to receive from a plurality of terminals T, installed at a plurality of stores, coupon transaction information including the number and type of coupons dispensed, store identification numbers, and customer account numbers. Host computer H is programmed to use the information to generate the weekly reports 4 and 6, shown in fig.1, for the manufacturer and related retailers respectively (col. 4: 52-64). Hence, **the manufacturer is able to prescribe limits for distribution of particular coupons on a collective and per store basis, as depicted fig.1.** the report 4 is provided to the manufacturer on a periodic basis, such as a weekly basis and includes coupon distribution information for each retail outlet. Report 4 may include the number of coupons dispensed, the store identification information, the dates and times of distribution, and customer identification data. This information is valuable to the manufacturer both as an aid in analyzing its marketing techniques and in detecting fraudulent coupon distribution or redemption. The report 6 provided to retailers is essentially like report 4 but includes information only as to the particular retail store(s) involved (col. 3: 39-54; fig. 1).

A customer enters a participating store having a terminal T, with a reader or Activator A coupled thereto, and uses an identification means such as a typical credit card to activate or access via the Activator A the coupon dispenser or terminal T (first

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location) to view or select at least one coupon. Upon detecting or sensing the presence of the credit card in its circuitry, Activator A reads the data encoded on magnetic tape or strip imprinted on the consumer's inserted credit card. Then, Activator A provides a signal to activate terminal T to the coupon-dispensing mode. **Using a credit card as an activator or identification means provides the informational capability to limit the number of unauthorized transactions or printed coupons, utilizing the same credit card at the same terminal T, and further prevents children from activating the machine or coupon dispenser T. Subsequently, terminal T, at the first location, retrieves and displays only coupons currently available to the identified consumer, identified via the credit card having a unique account number or identifier. Here, the customer can select and print at least one coupon via a printer connected to the terminal T (presenting the customer's credit card or object to a first reader device at a first location or terminal T installed at a first store and triggering a first response or issue a first coupon to the customer).** Further, upon activation, terminal T determines whether the same credit card account number has been used within the last week or other pre-designated period by comparing the present credit card number with those stored in memory or database coupled to processor 22 of the terminal T. If so, microcomputer 22 permits only those coupons still available for selection by that particular customer account number to be displayed. If, for example, the manufacturer has prescribed a one per customer limit for a coupon, and that coupon has been previously issued to the customer under the same credit card account number, then the coupon will not be displayed. Furthermore, even if the particular credit account number has no selection history and if the maximum number of a particular coupon either



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collectively or on a store-by-store basis have been issued, that coupon will no longer be displayed. In this fashion, a manufacturer is provided with much more control over the maximum redemption liability. **It should be recognized here that the customer comes to the (first) store and presents his credit card or object to a first reader device or Activator A, coupled to a first terminal T or kiosk, which senses the card and reads the customer's account number and issues a first response or a first coupon accordingly. Then the customer takes the issued or printed coupon to the cashier at the first store and uses the same object or credit card to identify himself during to thereby trigger a second response or a redemption of the coupon and/or to pay for the transaction, which involves the redemption of the coupon upon acquiring the required product (sensing the same object at the first store checkout or cash register reader or second reader and triggering a second response or a redemption process or a payment process). It should further be understood that the customer can subsequently take the same object or credit card to a second store or POS and present the same credit card or object to a second reader device or Activator A, coupled to a second and different terminal T or kiosk, which senses the card and reads the customer's account number and issues a second different response or second different coupon, different from the first response or the first coupon, based on the coupons currently available to the customer as per the central database or per the coupons or promotions for the second store or based upon information related to the customer's credit card or object account number stored in the second terminal T or processor 22 database installed in the second store, wherein the first coupon may not even be available, under the customer's credit card account, if it**

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**was a one per customer-only or one time type coupon or promotion** (col. 5: 45 to col. 6:10; col. 10: 17-61; col. 19: 51 to col. 20: 5; col. 29: 66 to col. 30: 20).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lemon, US Patent 4, 674, 041.

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As per claim 2, Lemon discloses a system having remotely located coupon printing stations installed in stores and capable of limiting the number of coupons printed in a given time period. Each coupon station has a display for indicating the available coupons, selection means to allow a consumer to choose the desired coupon and a coupon printer coupled to a station (T) for printing the selected coupon. The system also disables display of a particular coupon when a pre-selected coupon limit has been reached (col. 2: 16-19; col. 3: 39-54; col. 4: 47-51). The manufacturer may prescribe a particular number of coupons to be redeemed collectively and at each particular retail store. The present invention also greatly reduces the possibility of fraud by enabling coupons to be encoded with store identification numbers, expiration dates, uniform product codes, and other information at the point of distribution. The system **provides point of sale distribution and same day expiration dates** (col. 1: 55-67).

The system includes a stand-alone coupon-dispensing terminal T or kiosk provided at each retail store or location. Each stand-alone terminal communicates with a host central processing unit located remote from the stores (remote central repository or database storing coupon data). Coupons are displayed for customer selection at each dispensing terminal on a video menu via a cathode ray tube and touch screen combination. **Each terminal may be monitored and controlled via the host computer to obtain data such as the number of coupons issued and the identification of customers using the terminal.** The system enables the manufacturer to limit the number of a particular coupon issued **from a terminal at a store as well as the number issued in response to activation by a particular credit card.** Each terminal T, linked to the remote central database, includes a self-contained high speed coupon printer which prints

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the product information, date, time of day, uniform product code, expiration date, a store identification number or any other information desired for particular applications on each coupon issued. Each terminal T has at least a reader device capable of reading a magnetic strip on a credit card (col. 2: 5-28). A host computer H, related to the central database, is programmed to receive from a plurality of terminals T, installed at a plurality of stores, coupon transaction information including the number and type of coupons dispensed, store identification numbers, and customer account numbers. Host computer H is programmed to use the information to generate the weekly reports 4 and 6, shown in fig.1, for the manufacturer and related retailers respectively (col. 4: 52-64). Hence, **the manufacturer is able to prescribe limits for distribution of particular coupons on a collective and per store basis, as depicted fig.1.** the report 4 is provided to the manufacturer on a periodic basis, such as a weekly basis and includes coupon distribution information for each retail outlet. Report 4 may include the number of coupons dispensed, the store identification information, the dates and times of distribution, and customer identification data. This information is valuable to the manufacturer both as an aid in analyzing its marketing techniques and in detecting fraudulent coupon distribution or redemption. The report 6 provided to retailers is essentially like report 4 but includes information only as to the particular retail store(s) involved (col. 3: 39-54; fig. 1).

A customer enters a participating store having a terminal T, with a reader or Activator A coupled thereto, and uses an identification means such as a typical credit card to activate or access via the Activator A the coupon dispenser or terminal T (first location) to view or select at least one coupon. Upon detecting or sensing the presence of the credit card in its circuitry, Activator A reads the data encoded on magnetic tape or

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strip imprinted on the consumer's inserted credit card. Then, Activator A provides a signal to activate terminal T to the coupon-dispensing mode. **Using a credit card as an activator or identification means provides the informational capability to limit the number of unauthorized transactions or printed coupons, utilizing the same credit card at the same terminal T, and further prevents children from activating the machine or coupon dispenser T. Subsequently, terminal T, at the first location, retrieves and displays only coupons currently available to the identified consumer, identified via the credit card having a unique account number or identifier. Here, the customer can select and print at least one coupon via a printer connected to the terminal T (presenting the customer's credit card or object to a first reader device at a first location or terminal T installed at a first store and triggering a first response or issue a first coupon to the customer).** Further, upon activation, terminal T determines whether the same credit card account number has been used within the last week or other pre-designated period by comparing the present credit card number with those stored in memory or database coupled to processor 22 of the terminal T. If so, microcomputer 22 permits only those coupons still available for selection by that particular customer account number to be displayed. If, for example, the manufacturer has prescribed a one per customer limit for a coupon, and that coupon has been previously issued to the customer under the same credit card account number, then the coupon will not be displayed. Furthermore, even if the particular credit account number has no selection history and if the maximum number of a particular coupon either collectively or on a store-by-store basis have been issued, that coupon will no longer be displayed. In this fashion, a manufacturer is provided with much more control over the

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maximum redemption liability. It should be recognized here that the customer comes to the (first) store and presents his credit card or object to a first reader device or Activator A, coupled to a first terminal T or kiosk, which senses the card and reads the customer's account number and issues a first response or a first coupon accordingly. Then the customer takes the issued or printed coupon to the cashier at the first store and uses the same object or credit card to identify himself during to thereby trigger a second response or a redemption of the coupon and/or to pay for the transaction, which involves the redemption of the coupon upon acquiring the required product (sensing the same object at the first store checkout or cash register reader or second reader and triggering a second response or a redemption process or a payment process). It should further be understood that the customer can subsequently take the same object or credit card to a second store or POS and present the same credit card or object to a second reader device or Activator A, coupled to a second and different terminal T or kiosk, which senses the card and reads the customer's account number and issues a second different response or second different coupon, different from the first response or the first coupon, based on the coupons currently available to the customer as per the central database or per the coupons or promotions for the second store or based upon information related to the customer's credit card or object account number stored in the second terminal T or processor 22 database installed in the second store, wherein the first coupon may not even be available, under the customer's credit card account, if it was a one per customer-only or one time type coupon or promotion (col. 5: 45 to col. 6:10; col. 10: 17-61; col. 19: 51 to col. 20: 5; col. 29: 66 to col. 30: 20).

Lemon does not explicitly disclose **digitally watermarking an object, such as a credit card.**

However, electronically or digitally watermarking an object or document to ensure their authenticity to thereby identify any copies of the object or document is old and well known in the art. Indeed, a watermark is a mark, which is difficult to reproduce and it is laid over some other existing information for the purpose of identification and authenticity of the underlying information (e.g. visible watermark on currency). Further, electronic or digital watermark is invisible or imperceptible to the user. Therefore, electronically or digitally watermarking an object (credit card) or document makes it impossible to reproduce the object since the photocopies of the object will not contain the invisible or imperceptible watermark (mark) ("Official Notice").

Therefore, an ordinary skilled artisan would have been motivated at the time of the invention to incorporate the above disclosure ("Official Notice") into the coupon distribution system of Lemon so as to create a digital watermark image and then embed the watermarked image, containing customer's information used to assist in authenticating the credit card and/or the credit card holder, into the customer's credit card or imprint an invisible digital mark on the customer's credit card and to use a watermark reader, coupled to a terminal T, operable to decode the digital watermark sensed or detected from the customer's credit card when the customer presents the digitally watermarked credit card to the watermark reader to activate the terminal T and

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receive a first coupon at a first location and a second and different coupon at a second location when the same credit card is sensed or read by a second watermark reader device, wherein the second coupon is different from the first coupon, thereby adding an extra layer of security or protection to the coupon distribution and redemption system by completely eliminate the possibility that a malicious customer might duplicate a credit card (making credit card copies) and attempt to access a terminal T at a participating location to print one or more coupons associated with the credit card account for the digital watermark cannot be reproduced, while providing full control over the distribution and redemption of the coupons to the manufacturer who cannot be duped by unscrupulous customers using phony and unregistered credit cards as identification means to access the system (i.e. credit cards without an embedded digital watermark).

### **Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent 6,014,634A to Scroggie et al. discloses an incentive distribution network.

US Patent 6,108,656A to Durst et al. discloses an automatic access to electronic information via a printed medium.

US Patent 6,148,331A to Parry discloses an automatic access to electronic information via a printed medium.

US Patent 5,978,773A to Hudetz et al. discloses an automatic access to electronic information via a printed medium.



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US Patent 5,483,049A to Schulze discloses a system wherein a customer brings a printed medium to a retail store having a coupon imprinted thereon and wherein the customer exchanges the printed coupon for an exchange coupon available at the retail store and wherein the printed coupon was directly associated with the retail store.

Any inquiry concerning this communication from the Examiner should be directed to Jean D. Janvier, whose telephone number is (703) 308-6287). The aforementioned can normally be reached Monday-Thursday from 10:00AM to 6:00 PM EST. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Mr. Eric W. Stamber, can be reached at (703) 305- 8469.

For information on the status of your case, please call the help desk at (703) 308-1113. Further, the following fax numbers can be used, if need be, by the Applicant(s):

After Final- 703-872-9327

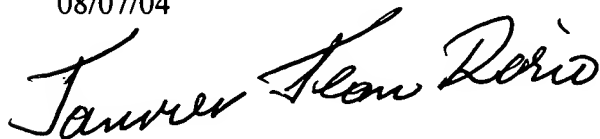
Before Final -703-872-9326

Non-Official Draft- 703-746-7240

Customer Service- 703-872-9325

JDJ

08/07/04

A handwritten signature in black ink, reading "Jean D. Janvier". The signature is written in a cursive, flowing style.